

What is claimed is:

1. An ink-jet recording apparatus comprising:

a recording head for receiving ink supplied via a first ink supply path and for ejecting ink droplets;

a second ink supply path along which ink is transmitted from an ink cartridge to said first ink supply path; and

a filter which is located at a joint area that forms a communication portion situated between said first ink supply path and said second ink supply path,

wherein ink induction paths are formed at said joint area on the side of said second ink supply path in order to use capillary attraction to induce the flow of ink through said filter.

2. An ink-jet recording apparatus according to claim 1, wherein said ink induction paths are constituted by projections that are radially formed at small pitches so as to capture an air bubble.

3. An ink-jet recording apparatus according to claim 1, wherein grooves are formed between said adjacent projections in order to supply ink to said filter using capillary attraction.

4. An ink-jet recording head according to claim 1, wherein said ink induction paths are extended from an ink inlet for said second ink supply path to an area that does not face said first ink supply path.

5. An ink-jet recording head according to claim 4, wherein said ink induction paths are formed at positions that are farthest from said first ink supply path.

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6. An ink-jet recording head according to claim 4, wherein said ink induction paths are formed as grooves.

7. An ink-jet recording head according to claim 4, wherein said ink induction paths are formed as ribs.

8. An ink-jet recording head according to claim 4, wherein said ink induction paths are integrally formed with said joint area.

9. An ink-jet recording head according to claim 4, wherein said ink induction paths are formed by mounting a groove formation member in said joint area.

10. An ink-jet recording head according to claim 4, wherein said ink induction paths are formed by mounting a rib formation member in said joint area.

11. An ink-jet recording head according to claim 4, wherein said ink induction paths are formed so as to be coaxial with said second ink supply path.

12. An ink-jet recording head according to claim 4, wherein said ink induction paths are formed in a holder that is to be mounted in said joint area, by using a rod-shaped member that is positioned coaxially with said second ink supply path.

13. An ink-jet recording head according to claim 4, wherein said ink induction paths are formed of <sup>an area</sup> ~~a layer~~ that has a greater wettability to ink than has the other area.

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R1  
add  
F2  
add  
B3  
add  
H4